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EXAMINER

HUYNH, THU V

ART UNIT	PAPER NUMBER
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2178

DATE MAILED: 09/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/932,110

Applicant(s)

BIRDER, MATTHEW D.

Examiner

Thu V. Huynh

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 June 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6,8-22 and 24-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5,9-21 and 25-32 is/are rejected.
- 7) ☐ Claim(s) 6,8,22 and 24 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 June 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 04/28/05.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. This action is responsive to communications: appeal brief filed on 6/20/05 to application filed on 08/16/2001.
2. Claims 1-6, 8-22, 24-32 are pending in the case. Claims 1 and 17 are independent claims.
3. Previous rejections have been withdrawn in view of the appeal brief.

Specification

4. The disclosure is objected to because it contains an embedded hyperlink (specification, page 2, lines 13). Applicant is required to delete the embedded hyperlink and/or other form of browser-executable code. See MPEP § 608.01.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. **Claims 1-6, 8-22, 24-32 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.**

Regarding independent claims 1 and 17, the term "approximation" in the claims is a relative term which renders the claim indefinite. The term "approximation" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. It is noted that in applicants' specification, page 9, lines 17-22 describes the transformation "gives to

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an approximation of the target document” and “the result document is as close as possible to the target document”. However, the applicants’ specification does not provide any range or scope for the term “approximation” or “close”. Therefore it is not clear what the meets and bounds of “approximate” in the context of claims 1 and 17.

Dependent claims 2-6, 8-16, 18-22, 24-32 are rejected for fully incorporating the dependencies of their base.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. **Claims 1-4, 14, 17-20, 30 are rejected under 35 U.S.C. 102(e) as being anticipated by Huang et al., US 2002/0147748 A1, priority filed 04/2001.**

Regarding independent claim 1, Worden teaches the steps of:

- analyzing a first document (Huang, fig. 7B; [0014], [0026], [0074]; analyzing a source file to identify source elements or objects corresponding to dynamic objects, wherein the source file is XML file);
- analyzing a second document (Huang, fig. 7B; [0014], [0026], [0074]; analyzing a target file to identify dynamic objects, wherein the target file is XML, HTML or WML file); and

- automatically generating, based upon said first and second document, a transformation document which, when processed in conjunction with said first document gives rise to a result document that is at least an approximation of said second document (Huang, fig. 7B; [0014], [0023]-[0026], [0054], [0074]-[0076]; automatically generating a stylesheet based on the source and target files, wherein the stylesheet is used to translate the source file to the target file).

Regarding dependent claim 2, which is dependent on claim 1, Huang teaches the limitations of claim 1 as explained above. Wordern teaches wherein said first and second document are XML (eXtensible Markup Language) documents (Huang, [0014], [0026], [0054]; source and target files are XML files).

Regarding dependent claim 3, which is dependent on claim 2, Huang teaches wherein said transformation document is an XSLT (eXtensible Stylesheet Language Transformation) document (Huang, [0054], [0081], XSL transformation).

Regarding dependent claim 4, which is dependent on claim 1, Huang teaches the limitations of claim 1 as explained above. Huang teaches wherein automatically generating said transformation document comprises:

- selecting a particular data structure pattern that occurs in said second document (Huang, [0081], selecting a data structure pattern, such as “C++ Programing” in the target document);

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- determining whether said first document comprises a matching data structure pattern that matches said particular data structure pattern (Huang, [0081], determining whether the source file comprises such pattern); and
- in response to a determination that said first document comprises said matching data structure pattern, inserting a template comprising one or more actions into said transformation document, said template being invoked when a particular triggering data structure pattern is encountered during processing of said transformation document, and when invoked, cause said particular data structured pattern to be create in said result document (Huang, [0052], [0055]; [0081]; based on matching string of such pattern in source and target files, inserting data and attributes of the XML source file into the target file, so that the inserted target file is used to generating a XSLT, wherein the XSLT including a template (see figures 3A, 3C, 3D), said template being invoked when “<xsl:template match=“recipe”>” trigger pattern is encountered during applying the transformation document to the source XML file to provide the target file).

Regarding dependent claim 14, which is dependent on claim 1. Huang teaches the steps of wherein analyzing said first document comprises: compiling a first list of data structure patterns that occur in said first document (Huang, fig. 6C, [0071], meta-tag association file to specify the source XML tags); and wherein analyzing said second document comprises: compiling a second list of data structure patterns that occur in said second document (Huang, fig. 9; labeling identified dynamic objects in the target file).

Claims 17-20 and 30 are for a computer system performing the method of claims 1-4 and 14 respectively and are rejected under the same rationale.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

(b) This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

10. **Claims 5, 13 and 21, 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Huang as applied to claims 1 and 4 above, and further in view of Menke, US 2002/0123878 A1, filed 02/2001.**

Regarding dependent claim 5, which is dependent on claim 4. Huang teaches the inserted target file is used to generating the XSLT, wherein the inserted target file include <xsl:> tags to associate elements or source objects in a source file (Huang, [0055], [0060], [0067], [0081]). The the <xsl:> tags, such as <xsl: template match="document">>, <xsl: template match="recipe">>, "<xsl: value-of select="title">>" (Huang, fig. 3B); and elements of the source file, such as "<document>", "<title>", "<recipe>" (Huang, fig. 2B). Huang also teaches generating the XSLT include a template to transform the tag <document> from the source XML

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file to the target file (Huang, [0052]). However, Huang does not explicitly disclose said particular triggering data structure pattern comprises said matching data structured pattern.

Menke teaches a dictionary file to define a match for terms to be translated (Menke, [0031]) and using a stylesheet having template being invoked when a particular triggering data structure pattern comprises said matching data structure pattern to translate a document (Menke, [0047], template match statement).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have combined Menke's teaching into Huang to provide triggering data structure pattern comprises said matching data structured pattern, since the combination would have allowed to translate a document into another using matching pattern based on a dictionary.

Regarding dependent claim 13, which is dependent on claim 1, Huang teaches determining whether any data structure pattern occurring in said first document is identical to a data structure pattern occurring in said second document (Huang, [0081]) and in response to a determination that said first document comprises said matching data structure pattern, inserting a template comprising one or more actions into said transformation document, said template being invoked when a particular triggering data structure pattern is encountered during processing of said transformation document, and when invoked, cause said particular data structured pattern to be create in said result document (Huang, [0052], [0055]; [0081]; based on matching string of such pattern in source and target files, inserting data and attributes of the XML source file into the target file, so that the inserted target file is used to generating a XSLT, wherein the XSLT including a template (see figures 3A, 3C, 3D), said template being invoked when "<xsl:template

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match="recipe">" trigger pattern is encountered during applying the transformation document to the source XML file to provide the target file).

However, Huang does not disclose the action is a copy action that cause the particular data structure pattern to be copied into said result document.

Menke teaches XSLT stylesheet includes templates, said template comprising actions wherein a copy action used to copy matching element in to a destination document (Menke, page 5, paragraph 47 and fig.1).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have combined Menke's copy action into Huang to copy the particular data structure pattern into said result document when the first (source) and second (target) documents have identically particular data structure pattern, since copy action would have reproduced that particular data structure in the result document for transforming the first document to the result document that is at least an approximation of the second document.

Claims 21 and 29 are for a computer system performing the method of claims 5 and 13 respectively and are rejected under the same rationale.

11. **Claims 9 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Huang as applied to claim 1 above, and further in view of Wheeler et al., US 2002/0055932 A1, filed 08/06/2001.**

Regarding dependent claim 9, which is dependent on claim 1, Huang teaches the limitations of claim 1 as explained above. Huang teaches wherein automatically generating said transformation document comprises:

- selecting a particular data structure pattern that occurs in said second document (Huang, [0081], selecting a data structure pattern, such as “C++ Programing” in the target document);
- determining whether said first document comprises a matching data structure pattern that matches said particular data structure pattern (Huang, [0081], determining whether the source file comprises such pattern); and
- in response to a determination that said first document comprises said matching data structure pattern, inserting a template comprising one or more actions into said transformation document, said template being invoked when a particular triggering data structure pattern is encountered during processing of said transformation document, and when invoked, cause said particular data structured pattern to be create in said result document (Huang, [0052], [0055]; [0081]; based on matching string of such pattern in source and target files, inserting data and attributes of the XML source file into the target file, so that the inserted target file is used to generating a XSLT, wherein the XSLT including a template (see figures 3A, 3C, 3D), said template being invoked when “<xsl:template match=“recipe”>” trigger pattern is encountered during applying the transformation document to the source XML file to provide the target file).

However, Huang does not explicitly disclose determining a synonymous data structure pattern that is synonymous with said particular data structure pattern selecting a particular data structure pattern that occurs in said second document; and determining whether said first document comprises a matching data structure pattern that matches said synonymous data structure pattern.

Wheeler teaches:

- determining a synonymous data structure pattern that is synonymous with said particular data structure pattern selecting a particular data structure pattern that occurs in said second document (Wheeler, page 3, paragraph 20; using synonym table lookup to determine data structure matching between source and target document); and
- determining whether said first document comprises a matching data structure pattern that matches said synonymous data structure pattern (Wheeler, page 3, paragraph 20 and page 9, paragraph 80; accessing a synonym table lookup to determine data structure, such as element or attribute in the source document that matches the data structure in the target document for mapping).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have combined Wheeler's comparison technique into Huang to provide different matching process, since many of comparison techniques, such as using synonym table lookup, extract string match, similarly match, etc. can be applied into XML document for mapping and transforming documents as Wheeler disclosed (Wheeler, page 3, paragraph 20 and page 7, paragraphs 65-68 and figures 7A).

Claim 25 is for a computer system performing the method of claim 9 and is rejected under the same rationale.

12. **Claims 10-11 and 26-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Huang and Wheeler as applied to claim 9 above, and further in view of Menke, US 2002/0123878 A1, filed 02/2001.**

Regarding dependent claim 10, which is dependent on claim 9. Huang teaches the inserted target file is used to generating the XSLT, wherein the inserted target file include <xsl:> tags to associate elements or source objects in a source file (Huang, [0055], [0060], [0067], [0081]). The the <xsl:> tags, such as <xsl: template match="document">, <xsl: template match="recipe">, "<xsl: value-of select="title">" (Huang, fig. 3B); and elements of the source file, such as "<document>", "<title>", "<recipe>" (Huang, fig. 2B). Huang also teaches generating the XSLT include a template to transform the tag <document> from the source XML file to the target file (Huang, [0052]). However, Huang does not explicitly disclose said particular triggering data structure pattern comprises said matching data structured pattern.

Menke teaches a dictionary file to define a match for terms to be translated (Menke, [0031]) and using a stylesheet having template being invoked when a particular triggering data structure pattern comprises said matching data structure pattern to translate a document (Menke, [0047], template match statement).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have combined Menke's teaching into Huang to provide triggering data

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structure pattern comprises said matching data structured pattern, since the combination would have allowed to translate a document into another using matching pattern based on a dictionary.

Regarding dependent claim 11, which is dependent on claim 9. Refer to the rationale relied to reject claim 9, the limitations of “accessing a set of information that indicates that said particular data structure pattern is synonymous with said synonymous data structure pattern” must be included in order to match pattern in matching process. The rationale is incorporated herein.

Claims 26-27 are for a computer system performing the method of claims 10-11 respectively and are rejected under the same rationale.

13. **Claims 12 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Worden further in view of Wheeler as applied to claims 11 above, and further in view of Weinberg et al., US 2002/0194196 A1, priority filed 10/2000.**

Regarding dependent claim 12, which is dependent on claim 11. Huang does not teach wherein said set of information is provided by a user.

Weinberg teaches transform tool allows a user modifies table lookup to create additional relationships of a data source (Weinberg, page 4, paragraph 44).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have combined Weinberg’s transform tool into Worden and Wheeler’s synonym table lookup to allow the user to add new words (patterns or synonyms), update

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information and/or create additional relationships in the table lookup, since modified table lookup would have provided accurately matching process. It is noted that modifying a dictionary by adding and/or deleting new words was well known in the art.

Claim 28 is for a computer system performing the method of claim 12, and is rejected under the same rationale.

14. Claims 15-16, 31-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Huang as applied to claims 1 above, and further in view of Worden et al., US 2003/0149934 A1, filed 05/2001.

Regarding dependent claim 15, which is dependent on claim 1. Huang does not explicitly disclose processing said transformation document in conjunction with a third document to derive a transformed document, wherein said third document is a different document from said first document.

Worden teaches processing a transformation document in conjunction with a third document to derive a transformed document, wherein said third document is a different document from said first document (Worden, page 3, paragraphs 39-41; automatically generating a transformation document (XSLT) to translate the first XML document or a document in first XML language (third document) to a document in second XML document).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have combined Worden's teaching into Huang's teaching to, since the combination would have provided a transformation to translate the source file as well as similar type of the source file into another document as Worden disclosed.

Regarding dependent claim 16, which is dependent on claim 15, Worden teaches the limitations of claim 15 as explained above. Worden teaches wherein said first document is of a particular type, and wherein said third document is of the same particular type (Worden, page 3, paragraphs 39-41; the first XML document in a first XML based language and the third document is also a first XML based language).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have combined Worden's teaching into Huang's teaching to, since the combination would have provided a transformation to translate the source file as well as similar type of the source file into another document as Worden disclosed.

Claims 31-32 are for a computer system performing the method of claims 15-16, respectively and are rejected under the same rationale.

Allowable Subject Matter

15. Claims 6, 8, 22 and 24 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims and overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Response to Arguments

16. Applicant's arguments, see appeal brief, filed 06/20/05, with respect to the rejection(s) of

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claim(s) 1 and 17 under Worden have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Huang et al. as explained in the rejection above.


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thu V Huynh whose telephone number is (571) 272-4126. The examiner can normally be reached on Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen S Hong can be reached on (571) 272-4124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TVH
August 29, 2005



STEPHEN HONG
SUPERVISORY PATENT EXAMINER